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- NEWS 3 FEB 02 Simultaneous left and right truncation (SLART) added for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
- NEWS 4 FEB 02 GENBANK enhanced with SET PLURALS and SET SPELLING
- NEWS 5 FEB 06 Patent sequence location (PSL) data added to USGENE
- NEWS 6 FEB 10 COMPENDEX reloaded and enhanced
- NEWS 7 FEB 11 WTEXTILES reloaded and enhanced
- NEWS 8 FEB 19 New patent-examiner citations in 300,000 CA/CAplus patent records provide insights into related prior art
- NEWS 9 FEB 19 Increase the precision of your patent queries -- use terms from the IPC Thesaurus, Version 2009.01
- NEWS 10 FEB 23 Several formats for image display and print options discontinued in USPATFULL and USPAT2
- NEWS 11 FEB 23 MEDLINE now offers more precise author group fields and 2009 MeSH terms
- NEWS 12 FEB 23 TOXCENTER updates mirror those of MEDLINE more precise author group fields and 2009 MeSH terms
- NEWS 13 FEB 23 Three million new patent records blast AEROSPACE into STN patent clusters
- NEWS 14 FEB 25 USGENE enhanced with patent family and legal status display data from INPADOCDB
- NEWS 15 MAR 06 INPADOCDB and INPAFAMDB enhanced with new display formats
- NEWS 16 MAR 11 EPFULL backfile enhanced with additional full-text applications and grants
- NEWS 17 MAR 11 ESBIOBASE reloaded and enhanced
- NEWS 18 MAR 20 CAS databases on STN enhanced with new super role for nanomaterial substances
- NEWS 19 MAR 23 CA/CAplus enhanced with more than 250,000 patent equivalents from China
- NEWS 20 MAR 30 IMSPATENTS reloaded and enhanced
- NEWS 21 APR 03 CAS coverage of exemplified prophetic substances enhanced
- NEWS 22 APR 07 STN is raising the limits on saved answers
- NEWS 23 APR 24 CA/CAplus now has more comprehensive patent assignee information
- NEWS 24 APR 26 USPATFULL and USPAT2 enhanced with patent
- assignment/reassignment information
 NEWS 25 APR 28 CAS patent authority coverage expanded
- NEWS 26 APR 28 ENCOMPLIT/ENCOMPLIT2 search fields enhanced
- NEWS 27 APR 28 Limits doubled for structure searching in CAS

REGISTRY

NEWS 28 MAY 08 STN Express, Version 8.4, now available

NEWS 29 MAY 11 STN on the Web enhanced

NEWS 30 MAY 11 BEILSTEIN substance information now available on STN Easy

NEWS EXPRESS MAY 08 09 CURRENT WINDOWS VERSION IS V8.4, AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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FILE 'HOME' ENTERED AT 14:09:49 ON 12 MAY 2009

=> FILE CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 14:10:07 ON 12 MAY 2009
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FILE COVERS 1907 - 12 May 2009 VOL 150 ISS 20
FILE LAST UPDATED: 10 May 2009 (2009510/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate

=> S US2006-570737/AP

L1 1 US2006-570737/AP

=> SEL RN

E1 THROUGH E31 ASSIGNED

=> FILE REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.84 3.06

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 10 MAY 2009 HIGHEST RN 1145355-82-3 DICTIONARY FILE UPDATES: 10 MAY 2009 HIGHEST RN 1145355-82-3

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> S E1-E31

1 100017-43-4/BI

(100017-43-4/RN)

1 1972-08-3/BI

(1972-08-3/RN)

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(247227-98-1/RN) 1 393588-66-4/BI

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(847949-24-0/RN) 1 847949-25-1/BI

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1 847949-26-2/BI

(847949-26-2/RN)

1 847949-27-3/BI

(847949-27-3/RN)

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=> D L2 1-31

L2

L2 ANSWER 1 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN

RN 847949-47-7 REGISTRY

ED Entered STN: 05 Apr 2005

CN 1-Cyclohexene-1-carboxylic acid, 3-[4-(1,1-dimethylheptyl)-2,6dihydroxyphenyl]-4-(1-methylethenyl)-, (3S,4S)- (CA INDEX NAME)

FS STEREOSEARCH MF C25 H36 O4

SR CA

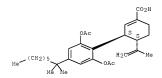
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).

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- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L2 ANSWER 2 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- 847949-46-6 REGISTRY RN
- ED Entered STN: 05 Apr 2005
- CN 1-Cyclohexene-1-carboxylic acid, 3-[2,6-bis(acetyloxy)-4-(1,1-
- dimethylheptyl)phenyl]-4-(1-methylethenyl)-, (3S,4S)- (CA INDEX NAME)
- FS STEREOSEARCH
- C29 H40 O6 MF CA
- SR
- L.C STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).



- **PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
 - 2 REFERENCES IN FILE CA (1907 TO DATE)
 - 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L2 ANSWER 3 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- 347949-45-5 REGISTRY RN
- ED Entered STN: 05 Apr 2005
- CN 1-Cyclohexene-1-carboxaldehyde, 3-[2,6-bis(acetyloxy)-4-(1,1dimethylheptyl)phenyl]-4-(1-methylethenyl)-, (3S,4S)- (CA INDEX NAME)
- STEREOSEARCH
- C29 H40 O5 MF
- SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 4 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN

RN 847949-44-4 REGISTRY

ED Entered STN: 05 Apr 2005

CN 1,3-Benzenedio1, 2-[(1S,6S)-3-(bromomethyl)-6-(1-methylethenyl)-2cyclohexen-1-yl]-5-(1,1-dimethylheptyl)-, 1,3-diacetate (CA INDEX NAME)
OTHER CA INDEX NAMES:

CN 1,3-Benzenediol, 2-[(15,68)-3-(bromomethyl)-6-(1-methylethenyl)-2cyclohexen-1-yl]-5-(1,1-dimethylheptyl)-, diacetate (9CI)

FS STEREOSEARCH

MF C29 H41 Br O4

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L2 ANSWER 5 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 347949-43-3 REGISTRY
- ED Entered STN: 05 Apr 2005
- CN 1,3-Benzenediol, 2-[(1S,6S)-2-(acetyloxy)-3-methylene-6-(1-

methylethenyl)cyclohexyl]-5-(1,1-dimethylheptyl)-, 1,3-diacetate (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3-Benzenediol, 2-[(1S,6S)-2-(acetyloxy)-3-methylene-6-(1-methylethenyl)cyclohexyl]-5-(1,1-dimethylheptyl)-, diacetate (9CI)

FS STEREOSEARCH

MF C31 H44 O6

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 6 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN

RN 847949-42-2 REGISTRY

ED Entered STN: 05 Apr 2005

CN 1,3-Benzenediol, 5-(1,1-dimethylheptyl)-2-[(1S,6S)-2-hydroxy-3-methylene-6-(1-methylethenyl)cyclohexyl]- (CA INDEX NAME)

FS STEREOSEARCH

MF C25 H38 O3

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry.

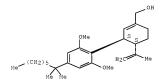
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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L2 ANSWER 7 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 847949-41-1 REGISTRY
- ED Entered STN: 05 Apr 2005
- CN 1-Cyclohexene-1-methanol, 3-[4-(1,1-dimethylheptyl)-2,6-dimethoxyphenyl]-4-(1-methylethenyl)-, (3S,4S)- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C27 H42 O3
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).



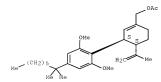
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2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L2 ANSWER 8 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 847949-40-0 REGISTRY
- ED Entered STN: 05 Apr 2005
- CN 1-Cyclohexene-1-methanol, 3-[4-(1,1-dimethylheptyl)-2,6-dimethoxyphenyl]-4(1-methylethenyl)-, 1-acetate, (3S,4S)- (CA INDEX NAME)
- OTHER CA INDEX NAMES:
- CN 1-Cyclohexene-1-methanol, 3-[4-(1,1-dimethylheptyl)-2,6-dimethoxyphenyl]-4-(1-methylethenyl)-, acetate, (3S,4S)- (9CI)
- FS STEREOSEARCH
- MF C29 H44 O4
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).



2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 9 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN

RN 847949-39-7 REGISTRY

ED Entered STN: 05 Apr 2005

CN Benzene, 2-[(15,65)-3-(bromomethyl)-6-(1-methylethenyl)-2-cyclohexen-1-yl]-5-(1,1-dimethylheptyl)-1,3-dimethoxy- (CA INDEX NAME)

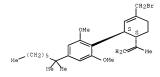
FS STEREOSEARCH

MF C27 H41 Br O2

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 10 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN

RN 847949-38-6 REGISTRY

ED Entered STN: 05 Apr 2005

CN Cyclohexanol, 2-[4-(1,1-dimethylheptyl)-2,6-dimethoxyphenyl]-6-methylene-3-(1-methylethenyl)-, 1-acetate, (25,38)- (CA INDEX NAME)
OTHER CA INDEX NAME)

CN Cyclohexanol, 2-[4-(1,1-dimethylheptyl)-2,6-dimethoxyphenyl]-6-methylene-3-(1-methylethenyl)-, acetate, (2S,3S)- (9CI)

FS STEREOSEARCH

MF C29 H44 O4

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry.

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- ANSWER 11 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN L2
- 847949-37-5 REGISTRY RN
- ED Entered STN: 05 Apr 2005
- CN Cyclohexanol, 2-[4-(1,1-dimethylheptyl)-2,6-dimethoxyphenyl]-6-methylene-3-(1-methylethenyl)-, (2S,3S)- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C27 H42 O3
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L2 ANSWER 12 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- 847949-36-4 REGISTRY RN
- ED Entered STN: 05 Apr 2005
- 7-Oxabicvclo[4.1.0]heptane, 5-[4-(1.1-dimethylheptyl)-2.6-dimethoxyphenyl]-CN
- 1-methyl-4-(1-methylethenyl)-, (1R, 4S, 5S, 6S)- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C27 H42 O3
 - SR CA
 - LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L2 ANSWER 13 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 847949-35-3 REGISTRY
- ED Entered STN: 05 Apr 2005
- CN Benzene, 5-(1,1-dimethylheptyl)-1,3-dimethoxy-2-[(1S,6S)-3-methyl-6-(1-methylethenyl)-2-cyclohexen-1-yl]- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C27 H42 O2
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 2 REFERENCES IN FILE CA (1907 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L2 ANSWER 14 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 847949-34-2 REGISTRY
- ED Entered STN: 05 Apr 2005
- CN 1-Cyclohexene-1-carboxylic acid, 3-[2,6-bis(acetyloxy)-4-pentylphenyl]-4-(1-methylethenyl)-, (3S,4S)- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C25 H32 O6

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

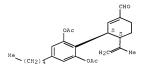
Absolute stereochemistry. Rotation (+).

$$\begin{array}{c} \text{CO}_2\text{H} \\ \text{OAc} \\ \text{OAc} \\ \text{OAc} \\ \text{Me} \\ \text{(CH}_2) \\ \text{Me} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 2 REFERENCES IN FILE CA (1907 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L2 ANSWER 15 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 847949-33-1 REGISTRY
- ED Entered STN: 05 Apr 2005
- CN 1-Cyclohexene-1-carboxaldehyde, 3-[2,6-bis(acetyloxy)-4-pentylphenyl]-4-(1-methylethenyl)-, (3S,4S)- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C25 H32 O5
- SR CA
 - LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 2 REFERENCES IN FILE CA (1907 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L2 ANSWER 16 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 847949-32-0 REGISTRY
- ED Entered STN: 05 Apr 2005
- CN 1,3-Benzenediol, 2-[(15,65)-3-(bromomethyl)-6-(1-methylethenyl)-2cyclohexen-1-yl]-5-pentyl-, 1,3-diacetate (CA INDEX NAME) OTHER CA INDEX NAMES:
- CN 1,3-Benzenedio1, 2-[(1S,6S)-3-(bromomethyl)-6-(1-methylethenyl)-2cyclohexen-1-yl]-5-pentyl-, diacetate (9CI)

FS STEREOSEARCH

MF C25 H33 Br O4

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).

- **PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
 - 2 REFERENCES IN FILE CA (1907 TO DATE)
 - 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L2 ANSWER 17 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 847949-31-9 REGISTRY
- ED Entered STN: 05 Apr 2005
- CN 1,3-Benzenediol, 2-[(18,68)-2-(acetyloxy)-3-methylene-6-(1methylethenyl)cyclohexyl]-5-pentyl-, 1,3-diacetate (CA INDEX NAME) OTHER CA INDEX NAMES:
- CN 1,3-Benzenediol, 2-[(1S,6S)-2-(acetyloxy)-3-methylene-6-(1-methylethenyl)cyclohexyl]-5-pentyl-, diacetate (9CI)
- FS STEREOSEARCH
- MF C27 H36 O6
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry.

- **PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
 - 1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L2 ANSWER 18 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 847949-30-8 REGISTRY
- ED Entered STN: 05 Apr 2005

CN 1,3-Benzenediol, 2-[(15,68)-2-hydroxy-3-methylene-6-(1-methylethenyl)cyclohexyl]-5-pentyl- (CA INDEX NAME)

FS STEREOSEARCH

MF C21 H30 O3

SR CA LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 19 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN

RN 847949-29-5 REGISTRY

ED Entered STN: 05 Apr 2005

1 1-Cyclohexene-1-methanol, 3-(2,6-dimethoxy-4-pentylphenyl)-4-(1-methylethenyl)-, (3S,4S)- (CA INDEX NAME)

FS STEREOSEARCH

MF C23 H34 O3

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).

$$\begin{array}{c} \text{OH} \\ \text{OMe} \\ \text{S} \\ \text{S} \\ \text{Me} \\ \text{(CH2)} \\ \text{Me} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 20 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN

RN 847949-28-4 REGISTRY

ED Entered STN: 05 Apr 2005

CN 1-Cyclohexene-1-methanol, 3-(2,6-dimethoxy-4-pentylphenyl)-4-(1-methylethenyl)-, 1-acetate, (3S,4S)- (CA INDEX NAME)
OTHER CA INDEX NAMES:

CN 1-Cyclohexene-1-methanol, 3-(2,6-dimethoxy-4-pentylphenyl)-4-(1-

methylethenyl)-, acetate, (3S,4S)- (9CI)

FS STEREOSEARCH

MF C25 H36 O4

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 21 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN

RN 847949-27-3 REGISTRY

ED Entered STN: 05 Apr 2005

CN Benzene, 2-[(1\$,6\$)-3-(bromomethyl)-6-(1-methylethenyl)-2-cyclohexen-1-yl]1,3-dimethoxy-5-pentyl- (CA INDEX NAME)

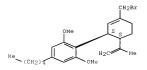
FS STEREOSEARCH

MF C23 H33 Br O2

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L2 ANSWER 22 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 847949-26-2 REGISTRY
- ED Entered STN: 05 Apr 2005
- CN Cyclohexanol, 2-(2,6-dimethoxy-4-pentylphenyl)-6-methylene-3-(1-methylenenyl)-, 1-acetate, (2S,3S)- (CA INDEX NAME)
 OTHER CA INDEX NAMES:
- CN Cyclohexanol, 2-(2,6-dimethoxy-4-pentylphenyl)-6-methylene-3-(1-methylethenyl)-, acetate, (25,35)- (9CI)
- FS STEREOSEARCH
- MF C25 H36 O4
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 2 REFERENCES IN FILE CA (1907 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L2 ANSWER 23 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 847949-25-1 REGISTRY ED Entered STN: 05 Apr 2005
- CN Cyclohexanol, 2-(2,6-dimethoxy-4-pentylphenyl)-6-methylene-3-(1-methylethenyl)-, (2S,3S)- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C23 H34 O3
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L2 ANSWER 24 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 847949-24-0 REGISTRY
- ED Entered STN: 05 Apr 2005
- CN 7-Oxabicyclo[4.1.0]heptane, 5-(2,6-dimethoxy-4-pentylphenyl)-1-methyl-4-(1methylethenyl)-, (1R,4S,5S,6S)- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C23 H34 O3
- MF C23 H34 U3 SR CA
- LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).

- **PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
 - 1 REFERENCES IN FILE CA (1907 TO DATE)
 - 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L2 ANSWER 25 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 393588-67-5 REGISTRY
- ED Entered STN: 19 Feb 2002
- N 1,3-Benzenediol, 2-[(1S,6S)-3-(hydroxymethyl)-6-(1-methylethenyl)-2cyclohexen-1-yl]-5-pentyl- (CA INDEX NAME)
- OTHER NAMES: CN (+)-7-Hydroxycannabidiol
- FS STEREOSEARCH
- MF C21 H30 O3
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).

- 5 REFERENCES IN FILE CA (1907 TO DATE)
- 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L2 ANSWER 26 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 393588-66-4 REGISTRY
- ED Entered STN: 19 Feb 2002
- CN 1,3-Benzenediol, 5-(1,1-dimethylheptyl)-2-[(1S,6S)-3-(hydroxymethyl)-6-(1-methylethenyl)-2-cyclohexen-1-yl)- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C25 H38 O3
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 5 REFERENCES IN FILE CA (1907 TO DATE)
- 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L2 ANSWER 27 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 047227-98-1 REGISTRY
- ED Entered STN: 17 Nov 1999
- CN Benzene, 1,3-dimethoxy-2-[(1S,6S)-3-methyl-6-(1-methylethenyl)-2cyclohexen-1-yl]-5-pentyl- (CA INDEX NAME)
- FS STEREOSEARCH
- MF C23 H34 O2
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

Absolute stereochemistry.

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L2 ANSWER 28 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 100017-43-4 REGISTRY
- ED Entered STN: 01 Feb 1986
- CN 1,3-Benzenedio1, 5-(1,1-dimethylhepty1)-2-[(15,65)-3-methyl-6-(1methylethenyl)-2-cyclohexen-1-yl)- (CA INDEX NAME)

OTHER CA INDEX NAMES:

- CN 1,3-Benzenediol, 5-(1,1-dimethylheptyl)-2-[3-methyl-6-(1-methylethenyl)-2-cyclohexen-1-yl]-, (1S-trans)-
- FS STEREOSEARCH
- MF C25 H38 O2
- SR CA
- LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL (*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1907 TO DATE)

8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L2 ANSWER 29 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 74219-29-7 REGISTRY
- ED Entered STN: 16 Nov 1984
- CN 1,3-Benzenedio1, 2-[(1S,6S)-3-methyl-6-(1-methylethenyl)-2-cyclohexen-1y1]-5-pentyl- (CA INDEX NAME)

OTHER CA INDEX NAMES:

- CN 1,3-Benzenedio1, 2-[3-methyl-6-(1-methylethenyl)-2-cyclohexen-1-yl]-5pentyl-, (1S-trans)-
- OTHER NAMES:
- CN (+)-Cannabidiol
- CN (+)-CBD
- FS STEREOSEARCH
- MF C21 H30 O2
- LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMINFORMRX, TOXCENTER, USPATFULL

(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).

- 13 REFERENCES IN FILE CA (1907 TO DATE)
- 13 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L2 ANSWER 30 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 68295-94-3 REGISTRY
- ED Entered STN: 16 Nov 1984
 - N 1-Cyclohexene-1-carboxylic acid, 3-(2,6-dihydroxy-4-pentylphenyl)-4-(1-methylethenyl)-, (3S,4S)- (CA INDEX NAME)

OTHER CA INDEX NAMES:

- CN 1-Cyclohexene-1-carboxylic acid, 3-(2,6-dihydroxy-4-pentylphenyl)-4-(1-methylethenyl)-, (3S-trans)-
 - FS STEREOSEARCH
- MF C21 H28 O4
- LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

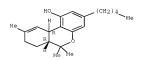
Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 4 REFERENCES IN FILE CA (1907 TO DATE)
- 4 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L2 ANSWER 31 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
- RN 1972-08-3 REGISTRY
- ED Entered STN: 16 Nov 1984
- CN 6H-Dibenzo[b,d]pyran-1-ol, 6a,7,8,10a-tetrahydro-6,6,9-trimethyl-3-pentyl-, (6aR,10aR)- (CA INDEX NAME)
- OTHER CA INDEX NAMES:
- CN 6H-Dibenzo[b,d]pyran-1-ol, 6a,7,8,10a-tetrahydro-6,6,9-trimethyl-3-pentyl, (6aR-trans)-
- CN Cannabinol, $\Delta 1$ -tetrahydro- (7CI)

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CN Cannabinol, tetrahydro- (6CI)
OTHER NAMES:
CN
   (-)-Δ1-Tetrahvdrocannabinol
CN
    (-)-Δ9-Tetrahvdrocannabinol
CN
    (-)-Δ9-trans-Tetrahydrocannabinol
CN
    (-)-3,4-trans-Δ1-Tetrahydrocannabinol
    (-)-trans-∆1-Tetrahydrocannabinol
CN
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    (-)-trans-∆9-Tetrahydrocannabinol
CN
    (-)-trans-Δ9-THC
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    (1)-∆1-Tetrahydrocannabinol
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    ∆1-Tetrahydrocannabinol
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    A1-THC
CN
    Δ9-Tetrahydrocannabinol
CN
    \Delta 9-THC
CN
   Δ9-trans-Tetrahydrocannabinol
CN
   Abbott 40566
CN
    Dronabinol
   1-∆1-trans-Tetrahydrocannabinol
CN
CN
   1-trans-∆9-Tetrahydrocannabinol
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    Marinol
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    NSC 134454
CN
   QCD 84924
CN
   SP 104
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   Tetrahvdrocannabinol
CN THC
CN
   trans-(-)-A9-Tetrahydrocannabinol
   trans-\Delta9-Tetrahydrocannabinol
CN
FS
    STEREOSEARCH
DR
    14146-29-3, 14146-43-1, 1363-19-5, 5957-27-7, 26108-45-2
MF
    C21 H30 O2
CT
    COM
    STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*,
LC.
      BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST,
     CIN, CSCHEM, DDFU, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB,
      IMSCOSEARCH, IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA, MEDLINE, MRCK*,
      MSDS-OHS, NAPRALERT, PHAR, PIRA, PROMT, PROUSDDR, PS, RTECS*, SPECINFO,
      SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, USPATOLD
       (*File contains numerically searchable property data)
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Absolute stereochemistry. Rotation (-).



Other Sources: WHO

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5278 REFERENCES IN FILE CA (1907 TO DATE)
154 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

5283 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FILE CAPLUS COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 64.03 67.09

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 14:11:20 ON 12 MAY 2009
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FILE COVERS 1907 - 12 May 2009 VOL 150 ISS 20 FILE LAST UPDATED: 10 May 2009 (20090510/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

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This file contains CAS Registry Numbers for easy and accurate

=> D IBIB ABS IND L1

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2005:238931 CAPLUS Full-text

DOCUMENT NUMBER: 142:316978

TITLE: Preparation of (+)-cannabidiol derivatives for use in

pharmaceutical compositions as immune system modulators, analgesics and anti-inflammatory agents

INVENTOR(S): Mechoulam, Raphael; Fride, Ester

PATENT ASSIGNEE(S): Yissum Research Development Company of the Hebrew

University of Jerusalem, Israel; Ariel Ltd.

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATEN: | r NO. | KIND | DATE | APPI | LICATION | NO. | DATE |
|--------|----------|------|----------|------|----------|-----|----------|
| | | | | | | | |
| WO 200 | 05023741 | A2 | 20050317 | WO | 2004-IL8 | 310 | 20040908 |
| WO 200 | 05023741 | A3 | 20050421 | | | | |

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
          CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
          GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
          LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
          NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
          TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
       RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
          AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
          EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
           SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE,
          SN, TD, TG
    US 20070082954
                                       US 2006-570737
                       A1
                             20070412
                                                              20060928 <--
PRIORITY APPLN. INFO.:
                                        IL 2003-157849
                                                           A 20030910
                                                     W 20040908
                                    WO 2004-IL810
                       CASREACT 142:316978; MARPAT 142:316978
OTHER SOURCE(S):
```

AB (+)-Cannabidiol derivs., such as I [R = H; R4 = (CH2) 4Me, CMe2(CH2) 5Me; R7 = CH2OH, CO2H, were prepared for therapeutic use as agents which have selective activity in the peripheral and not in the central nervous system. These (+)-cannabidiols are claimed for use as analgesics, immunomodulators and anti-inflammatory agents useful for the treatment of diseases and conditions, such as inflammatory bowel disease, diarrhea and inflammatory pain. Thus, (+)-cannabidiol derivative I [R = H, R4 = (CH2) 4Me, R7 = CH2OH] was prepared via a multistep synthesis starting from (+)-cannabidiol I [R = H, R4 = (CH2) 4Me, R7 = Me]. The prepared (+)-cannabidiol derivs. were screened for a variety of pharmacol. activities, such as CBI and CBZ type cannabinoid receptor binding, analgesic activity and inhibition of intestinal motility.

IC ICM C07C039-00

CC 30-20 (Terpenes and Terpenoids)
Section cross-reference(s): 1, 63

ST cannabidiol deriv prepn analgesic antiinflammatory agent; immunomodulator cannabidiol deriv prepn; inflammation treatment cannabidiol deriv prepn; immune disorder treatment cannabidiol deriv prepn; pain inflammatory treatment cannabidiol deriv prepn; inflammatory bowel disease treatment cannabidiol deriv prepn; diarrhea treatment cannabidiol deriv prepn; peripheral nervous system disorder treatment cannabidiol deriv prepn; gastrointestinal tract modulator cannabidiol deriv prepn; CB1 CB2 cannabinol receptor binding cannabidiol deriv prepn

IT Peripheral nervous system

(disorders, treatment; preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

IT Intestine, disease

Pain

(inflammatory, treatment; preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and

anti-inflammatory agents)

IT Analgesics

Anti-inflammatory agents

Immunomodulators

(preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

IT Diarrhea

Digestive tract, disease

Immune disease

Inflammation

(treatment; preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

IT Cannabinoid receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (type CB1; preparation of (+)-cannabidiol derivs. for use in pharmaceutical

compns. as immune system modulators, analgesics and anti-inflammatory agents)

IT Cannabinoid receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(type CB2; preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

IT 1972-08-3, Δ9-THC

RL: PAC (Pharmacological activity); BIOL (Biological study)

(preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

IT 74219-29-7, (+)-Cannabidiol 100017-43-4

RL: PAC (Pharmacological activity); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

IT 68295-94-3P 393588-66-4P 393588-67-5P 847949-47-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

IT 247227-98-1P 847949-24-0P 847949-25-1P 847949-26-2P 847949-27-3P

847949-28-4P 847949-29-5P 847949-30-8P 847949-31-9P 847949-32-0P

847949-33-1P 847949-34-2P 847949-35-3P 847949-36-4P 847949-37-5P 847949-38-6P 847949-39-7P 847949-40-0P 847949-41-1P 847949-42-2P

847949-43-3P 847949-44-4P 847949-45-5P 847949-46-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

=> FIL MARPAT

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 3.88 70.97

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL

ENTRY SESSION

CA SUBSCRIBER PRICE -0.82 -0.82

FILE 'MARPAT' ENTERED AT 14:12:00 ON 12 MAY 2009

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FILE CONTENT: 1961-PRESENT VOL 150 ISS 20 (20090511/ED)

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MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 20090088416 02 APR 2009
EP 20208081315 26 MAR 2009
EP 2042172 01 APR 2009
WO 2009065074 26 MAR 2009
WO 2009042853 02 APR 2009
GB 2452157 25 FEB 2009
FR 2921369 27 MAR 2009
RU 2350621 27 MAR 2009
CA 2639658 17 MAR 2009

The new MARPAT User Guide is now available at: http://www.cas.org/support/stngen/stndoc/marpat.html.

=> SET NOTICE DISPLAY 1

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND SET COMMAND COMPLETED

=> D ACC 142:316978 ALL

THE ESTIMATED COST FOR THIS REQUEST IS 5.27 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

ANSWER 1 MARPAT COPYRIGHT 2009 ACS on STN

AN 142:316978 MARPAT Full-text

- TI Preparation of (+)-cannabidiol derivatives for use in pharmaceutical compositions as immune system modulators, analgesics and anti-inflammatory agents
- IN Mechoulam, Raphael; Fride, Ester
- PA Yissum Research Development Company of the Hebrew University of Jerusalem, Israel; Ariel Ltd.
- SO PCT Int. Appl., 56 pp. CODEN: PIXXD2
- DT Patent
- LA English
- IC ICM C07C039-00
- CC 30-20 (Terpenes and Terpenoids)
- Section cross-reference(s): 1, 63

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

1 WO 2005023741 A2 20050317 WO 2004-IL810 20040908
WO 2005023741 A3 20050421
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MM, MZ, NA, NI, NO, NZ, OM, PG, PH, PT, RO, RU, SC, DS, ES, GG, KS, LI, SY,

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 20070082954 A1 20070412 PRAI IL 2003-157849 20030910

20070412 00 2000 370737

WO 2004-IL810 20040908

OS CASREACT 142:316978 GI

$$\begin{array}{c} R^{7} \\ \text{OR} \\ \text{H2C} \\ \text{Me} \\ \text{OR} \\ \text{R4} \\ \text{I} \end{array}$$

- AB (+)—Cannabidiol derivs., such as I [R = H; R4 = (CH2) 4Me, CMe2(CH2) 5Me; R7 = CH2CH, CO2H], were prepared for therapeutic use as agents which have selective activity in the peripheral and not in the central nervous system. These (+)—cannabidiols are claimed for use as analgesics, immunomodulators and anti-inflammatory agents useful for the treatment of diseases and conditions, such as inflammatory bowel disease, diarrhea and inflammatory pain. Thus, (+)—cannabidiol derivative I [R = H, R4 = (CH2) 4Me, R7 = CH2CH] was prepared via a multistep synthesis starting from (+)—cannabidiol I [R = H, R4 = (CH2) 4Me, R7 = Me]. The prepared (+)—cannabidiol derivs. were screened for a variety of pharmacol. activities, such as CB1 and CB2 type cannabinoid receptor binding, analgesic activity and inhibition of intestinal motility.
- ST cannabidiol deriv prepn analgesic antiinflammatory agent; immunomodulator cannabidiol deriv prepn; inflammation treatment cannabidiol deriv prepn; immune disorder treatment cannabidiol deriv prepn; pain inflammatory treatment cannabidiol deriv prepn; inflammatory bowel disease treatment cannabidiol deriv prepn; diarrhea treatment cannabidiol deriv prepn; peripheral nervous system disorder treatment cannabidiol deriv prepn; gastrointestinal tract modulator cannabidiol deriv prepn; CB1 CB2 cannabinol receptor binding cannabidiol deriv prepn
- IT Peripheral nervous system

(disorders, treatment; preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

IT Intestine, disease

Pain

(inflammatory, treatment; preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

IT Analgesics

Anti-inflammatory agents

Immunomodulators

(preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

IT Diarrhea

Digestive tract, disease

Immune disease

Inflammation

(treatment; preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

Cannabinoid receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (type CBI; preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

IT Cannabinoid receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (type CB2; preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

IT 1972-08-3, Δ9-THC

RL: PAC (Pharmacological activity); BIOL (Biological study) (preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as

immune system modulators, analgesics and anti-inflammatory agents)
T 74219-29-7, (+)-Cannabidiol 100017-43-4

RL: PAC (Pharmacological activity); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

IT 68295-94-3P 393588-66-4P 393588-67-5P 847949-47-7P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

[I 247227-98-10 847949-24-00 847949-25-10 847949-26-20 847949-27-38 847949-28-40 847949-38-40 847949-31-90 847949-31-90 847949-31-50 847949-31-50 847949-36-40 847949-37-50

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847949-43-3P 847949-44-4P 847949-45-5P 847949-46-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of (+)-cannabidiol derivs. for use in pharmaceutical compns. as immune system modulators, analgesics and anti-inflammatory agents)

MSTR 1

G1 = Me / CO2H / CH2OH

= alkyl <containing 5-12 C> /
alkoxy <containing 5-9 C> (opt. substd. by Ph) / 20 /
(Specifically claimed: pentyl / 23)

 $2^{\frac{6}{3}} - 0 - 64$ $2^{\frac{Me}{3}} - CH2 = \frac{Me}{2^{\frac{1}{3}}} = \frac{1}{3} =$

G3 = (1-7) CH2

G4 = alkyl <containing 1-5 C>

Patent location:

Note: and pharmaceutically acceptable salts and esters

Note: substitution is restricted

claim 6

=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND SET COMMAND COMPLETED

=> LOG HOLD

(FILE 'HOME' ENTERED AT 14:09:49 ON 12 MAY 2009)

FILE 'CAPLUS' ENTERED AT 14:10:07 ON 12 MAY 2009
L1 1 SEA FILE=CAPLUS SPE=ON PLU=ON US2006-570737/AP
SEL RN

FILE 'REGISTRY' ENTERED AT 14:10:37 ON 12 MAY 2009

2 31 SEA FILE-REGISTRY SPE-ON PLU-ON (100017-43-4/BI OR 1972-08-3/BI OR 247227-98-1/BI OR 393588-66-4/BI OR 393588-67-5/BI OR 68295-94-3/BI OR 74219-29-7/BI OR 847949-24-0/BI OR 847949-25-1/BI OR 847949-26-2/BI OR 847949-27-3/BI OR 847949-28-4/BI OR 847949-26-2/BI OR 847949-38-4/BI OR 847949-38-4/BI OR 847949-33-2/BI OR 847949-33-3/BI OR 847949-33-3/BI OR 847949-33-3/BI OR 847949-33-3/BI OR 847949-33-3/BI OR 847949-33-6-4/BI OR 847949-36-5/BI OR 847949-38-4/BI OR 847949-38-4/BI OR 847949-38-6/BI OR 847949-38-6/BI OR 847949-38-6/BI OR 847949-38-6/BI OR 847949-34-5/BI OR 847949-34-6/BI OR 847949-34-5/BI OR 847949-34-6/BI OR 847949-34-7/BI OR 847949-34-7/BI OR 847949-34-7/BI OR 847949-34-7/BI

D L2 1-31

FILE 'CAPLUS' ENTERED AT 14:11:20 ON 12 MAY 2009 D IBIB ABS IND L1

FILE 'MARPAT' ENTERED AT 14:12:00 ON 12 MAY 2009

SET NOTICE DISPLAY 1 D ACC 142:316978 ALL SET NOTICE LOGIN DISPLAY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 5.75 76.72

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE

CA SUBSCRIBER PRICE

ENTRY SESSION -0.78 -1.60

TOTAL.

SESSION WILL BE HELD FOR 120 MINUTES STN INTERNATIONAL SESSION SUSPENDED AT 14:12:27 ON 12 MAY 2009